ABSTRACT OF DISCLOSURE

The present invention relates to a packet transfer communication device. More particularly, the present invention relates to a congestion control unit to designed handle communication at high speed by reducing a load of congestion processing conducted in a core router and an edge router. The congestion control unit comprises: an input data measurement section for measuring a quantity of packet data to be inputted; and a packet discarding judgment section for conducting a discarding judgment of an arriving packet and outputting a packet not to be discarded into an output queue and the input data coefficient section, the input data measurement section including a coefficient section for outputting a constant quantity of packet data, which are inputted from the packet discarding judgment section, at a predetermined period and also including a smooth queue length calculating section for accumulating data outputted from the coefficient section and outputting a constant quantity of accumulated data in the predetermined period, wherein the packet discarding judgment section conducts congestion control by a packet discarding judgment based on a smooth queue length which is a quantity of accumulated data composed of a difference between a quantity of input data and a quantity of output data at each predetermined period in the smooth queue length calculating section.